



GREEN MOUNTAIN
BIOTECH

Botaniplex™ BALANCE SC

Restore harmony to your
oily skin and scalp



Phellodendron chinense
(Chinese Cork Tree)



Chrysanthemum indicum
(Chrysanthemum)



BOTANIPILEX™ BALANCE SC

Botaniplex™ BALANCE SC is crafted to soothe and rebalance irritated, oily skin and scalp. It helps manage skin disorders such as acne, fungal acne, dandruff, and seborrheic dermatitis, drawing on powerful activities of botanical ingredients to keep inflammation, microbial growth and sebum production under control.

INCI:

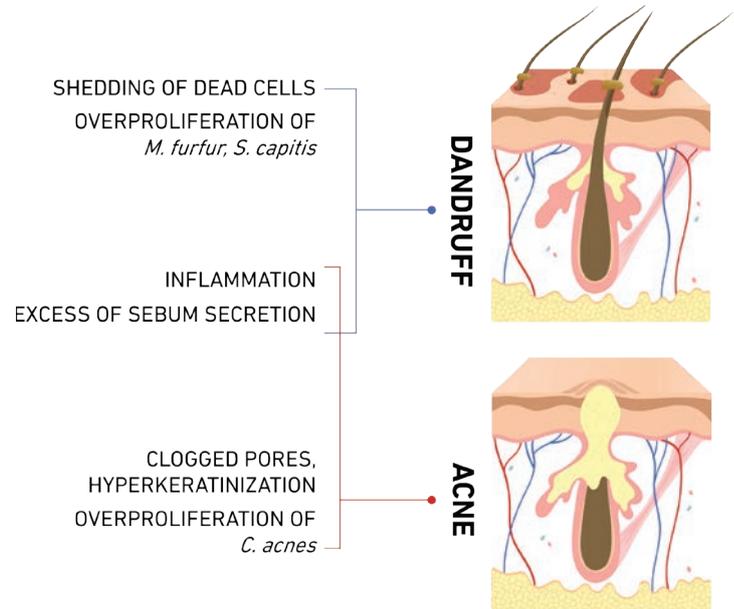
Glycerin, Water, *Phellodendron chinense* bark extract, *Chrysanthemum indicum* flower extract



MICROBIOME BALANCE

Oily skin: cause and microbial influences

Acne and some dandruff types result from increased sebum production, leading to inflammation. *Malassezia* spp. and *Staphylococcus capitis* (*S. capitis*) overgrowth contribute to dandruff, while *Cutibacterium acnes* (*C. acnes*) overgrowth is implicated in acne. This imbalance overwhelms beneficial organisms like *Staphylococcus epidermidis* (*S. epidermidis*). **Botaniplex™ BALANCE SC** restores microbiome balance with prebiotic and antimicrobial properties, alleviating both acne and dandruff.

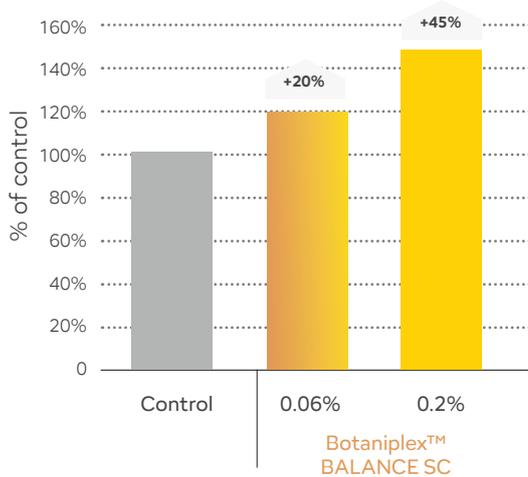


MICROBIOME BALANCE

In vitro efficacy

Prebiotic effect on commensal bacteria

S. epidermidis

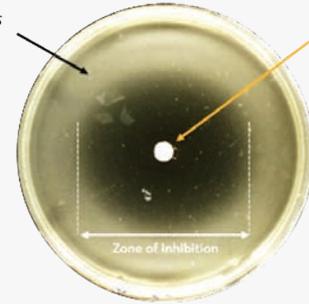


Antibiotic effect on pathogenic bacteria

C.acnes

C.acnes

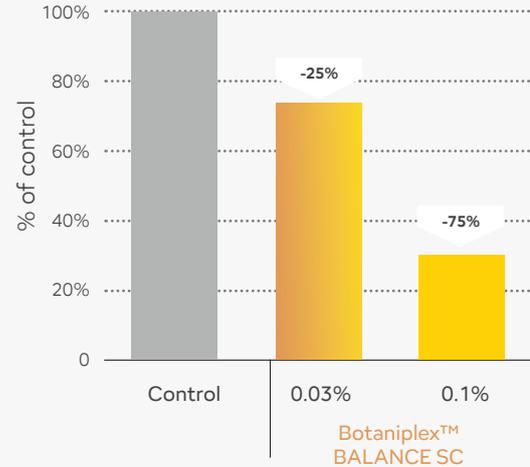
Botaniplex™
BALANCE SC



Zone of Inhibition

Inhibition zone: 4 cm diameter

S.capitis



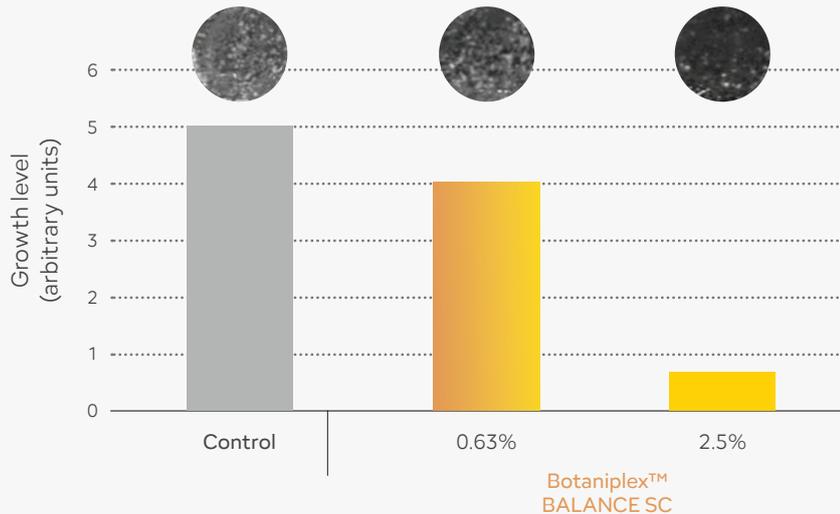
MICROBIOME BALANCE

In vitro efficacy

Malassezia is a yeast naturally found on the skin, particularly the scalp. It contributes to dandruff by breaking down sebum into irritants like oleic acid, which can trigger inflammation and excessive shedding of skin cells.

Botaniplex™ BALANCE SC inhibits the growth of *Malassezia furfur*.

Antifungal effect on *Malassezia furfur*



ANTI- INFLAMMATORY

Inflamed pimples, a hallmark of acne, result from complex inflammatory processes triggered by the interplay of clogged pores, bacteria (such as *Cutibacterium acnes*, and the skin's immune response. At the core of this inflammation are pro-inflammatory mediators that orchestrate the skin's defense mechanisms, including:

- **PGE2**, which increases vascular permeability and pain sensitization
- **TNF- α** , drives immune cell recruitment and inflammation.
- **IL-6**, amplifies immune activation and inflammatory protein production.

Together, these mediators contribute to the visible and often painful symptoms of inflamed pimples, underscoring the need for targeted approaches to modulate their activity in acne management.

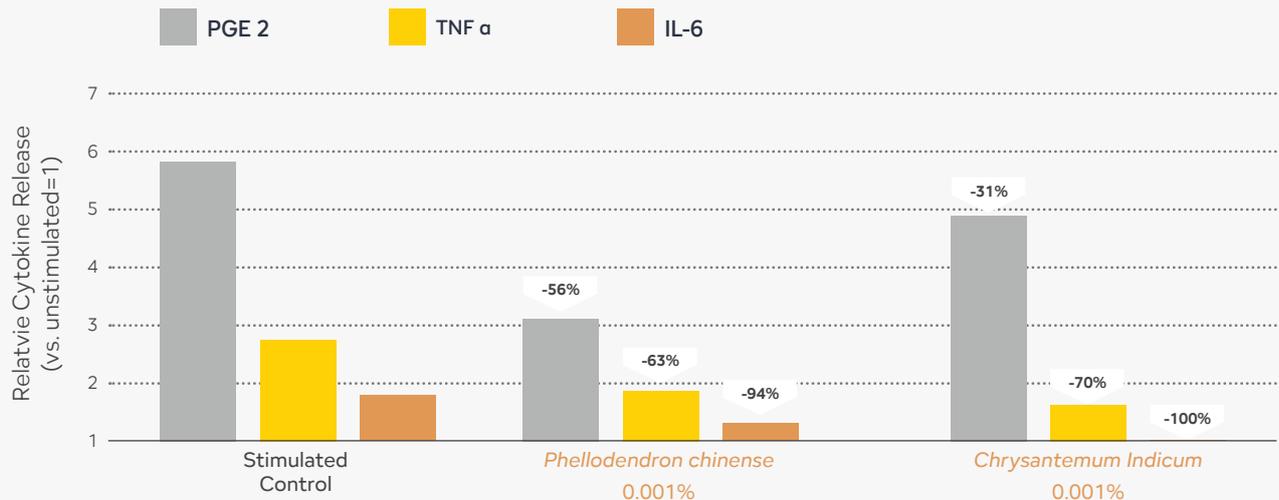


ANTI- INFLAMMATORY

In vitro efficacy

Cytokine inhibition

Herbal extracts, *Chrysanthemum indicum* and *Phellodendron chinense* in **Botaniplex™ BALANCE SC**, inhibit release of pro-inflammatory agents from inflammation-like stimulated keratinocytes.



SEBUM CONTROL

CLINICAL EVALUATION



In-vivo efficacy

Objective: Efficacy and tolerability of Face Gel for oily skin containing **3% Botaniplex™ BALANCE SC**

Design: Interventional, open-label

Study Population : 10 healthy female adults (age ≥ 18) with oily to combination skin

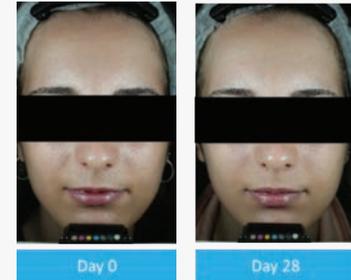
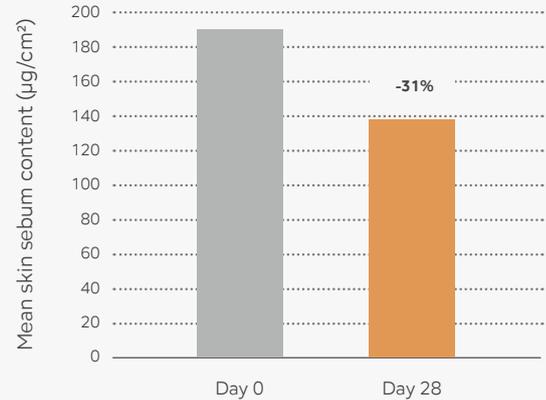
Application: Apply Gel twice daily
Study duration – 28 Days
2 clinical visits: Day 0 & 28

SEBUM CONTROL

In-vivo efficacy - Results

- Significant reduction in skin sebum content
- Oiliness was visibly reduced
- Reduction in skin sebum was observed in all subjects (-17% to -47%)
- High (80%) satisfaction in self assessment

Sebumeter® Results:



SEBUM CONTROL

In-vivo efficacy - Results

Q1: I am satisfied with the overall performance of the sebum reduction treatment.

Q2: The treatment has improved the overall texture of my skin, making it smoother and less oily.

Q3: My skin feels less greasy after using the treatment.

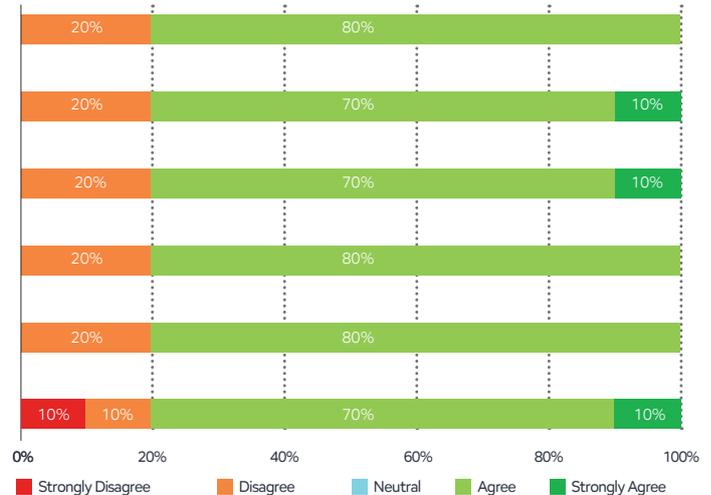
Q4: Since using the product, I have noticed a visible reduction in shine on my skin.

Q5: Oiliness is eliminated quickly.

Q6: The product effectively reduces oiliness on my skin.

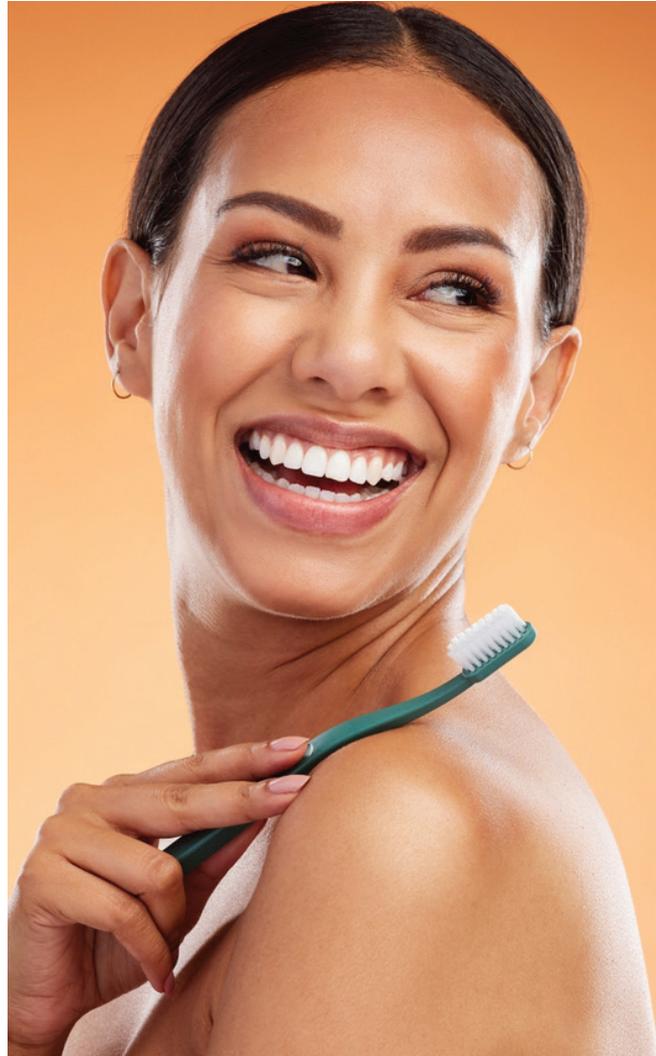
Satisfaction with the treatment was reported by 8 out of 10 subjects after 28 days of treatment.

Botaniplex™ BALANCE SC significantly reduces sebum content and supported by high satisfaction in self-assessment.



ORAL CARE

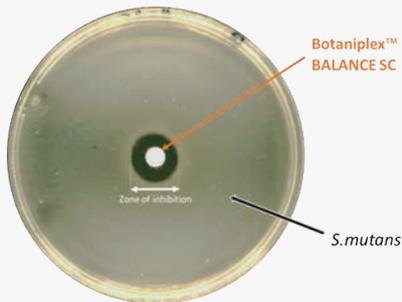
Maintaining optimal oral care is essential for preventing tooth decay and promoting dental health. A key contributor to tooth decay is *Streptococcus mutans*, a bacterium that produces acids, eroding tooth enamel and leading to cavities. **Botaniplex™ BALANCE SC** is a botanical solution designed to inhibit the growth of *S. mutans*, helping to reduce the risk of decay and support a healthier oral microbiome.



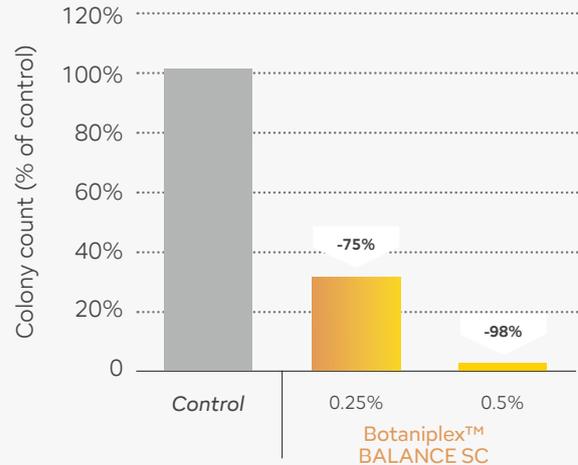
ORAL CARE

In-vitro efficacy

Botaniplex™ BALANCE SC inhibits growth of *Streptococcus mutans*, a bacterium associated with tooth decay.



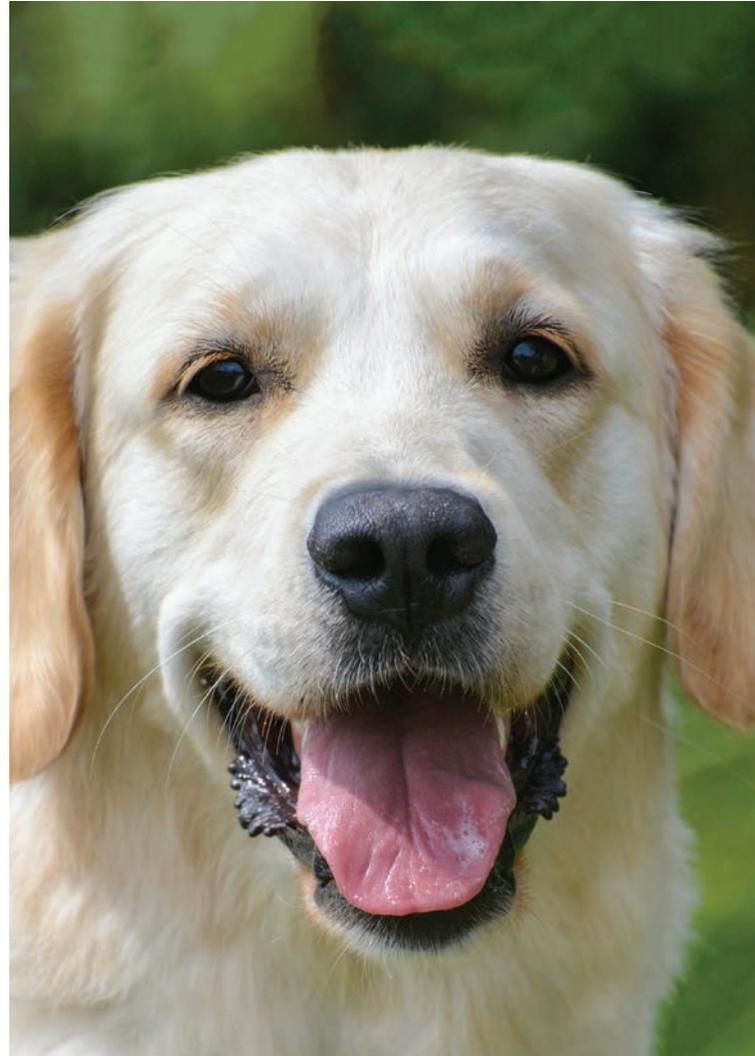
Inhibition zone: 1.4 cm diameter



PET CARE

Healthy skin is vital for pets' overall well-being, but fungal infections can pose serious challenges. *Microsporum canis*, *Trichophyton mentagrophytes*, and *Microsporum gypseum* are common fungi that can cause skin issues like ringworm, leading to itching, hair loss, and irritation.

Effective skin care for pets focuses on preventing and managing these infections to keep their skin and coat healthy and resilient.



PET CARE

In-vitro efficacy - anti fungal

Fungi Strains: Five strains of fungi were examined:

- 3 of *Microsporum canis*
- 1 *Trichophyton mentagrophytes*
- 1 *Microsporum gypseum*

All strains were isolated shortly before the test from pets suffering from clinical dermatophytosis.

Method: Disk diffusion test

Fungal Strain	Zone of inhibition (mm)				
	<i>T. mentagrophytes</i>	<i>M. gypseum</i>	<i>M. canis 4101</i>	<i>M. canis 4672</i>	<i>M. canis 3212</i>
<i>Phellodendron chinense</i>	34	14.7	50.2	47	31.2

Results: *Phellodendron chinense* showed a remarkable inhibition effect against the fungi isolated in this experiment.

Botaniplex™ BALANC SC containing *Phellodendron chinense* and *Chrysanthemum indicum* is the perfect combination for pets suffering from clinical dermatophytosis.

PRESERVATIVE BOOSTER

Keeping cosmetic products fresh and effective over time is always a challenge. While chemical preservatives have traditionally been used, today's consumers prefer cleaner, more thoughtful formulations. Formulators are now seeking solutions that protect products from the start, with fewer additives and without compromising performance.

This is where **Botaniplex™ BALANCE SC** adds value.



PRESERVATIVE BOOSTER

Challenge test- Results

- **Concentration:** 3%
- **pH:** 5.6
- **Objective:** Evaluate contribution to preservative performance in a balanced cosmetic system

Results:

The inclusion of **Botaniplex™ BALANCE SC** supports preservative efficacy under challenge test conditions, demonstrating a preservative boosting effect aligned with its microbiome balancing activity.

Challenge test Results:

Test condition	<i>P. aeruginosa</i>	<i>S. aureus</i>	<i>E. coli</i>	<i>C. albicans</i>	<i>A. brasiliensis</i>	Overall
0.5% Sodium Benzoate	✓	✗	✓	✓	✓	Does not meet Criteria A
0.5% Sodium Benzoate + 3% Botaniplex™ BALANCE SC	✓	✓	✓	✓	✓	Meets Criteria A

MARKETING CLAIMS



Microbiome balance



Sebum regulation



Anti-oxidant



Assistance in redness reduction



Preservative booster



APPLICATIONS



Skin care:

Cream, Lotion or Gel for acne
(including fungal acne)



Scalp care:

Shampoo or Lotion for oily and
irritated scalp with flakes
(Dandruff, Seborrheic dermatitis)



Oral Care:

Toothpaste, Mouthwash



Pet Care:

Shampoo, Lotion



TECHNICAL INFORMATION



Suggested use level: 2-5% for cosmetic claims
3-5% for preservative booster

Formulation: Water miscible
Incorporation during the cooling phase (<40°C).
Temperatures of up to 60°C for a short time do not affect the stability

Patent: Granted: "Synergistic herbal compositions with prebiotic properties for treatment of acne"
WO2018087766 A1

BENEFITS

Aqueous herbal extracts

100% natural origin

Preservative-free

Easy to formulate

High quality

Established safety

Proven efficacy

Sustainability

COSMOS approved

ISO 9001

China compliant



THE BOTANIPILEX™ SYSTEMS



Botaniplex™ BALANCE SA

- Improves microbiome balance
- Assists in reducing redness and irritation
- Stimulates the skin's natural defense mechanisms



Botaniplex™ GUARD

- Relieves lip-sore discomfort
- Helps to relieve genital lesions
- Soothes redness, itchiness, and irritation
- Improves microbiome balance



Botaniplex™ CALM

- Reduces dryness, wrinkling and fragility in aging skin
- Helps slow skin pigmentation associated with aging
- Reduces and soothes redness and irritation



Botaniplex™ CLEAR

- Clears spots, pimples and blemishes
- Reduces redness and irritation
- Improves microbiome balance



GREEN MOUNTAIN BIOTECH

WWW.GREENMBIO.COM

All industrial or intellectual property rights in this presentation are owned by Green Mountain Biotech (GMB) and may not be used without written consent. The information and advice provided are given in good faith, based on our knowledge and experience. We reserve the right to make changes due to technological advancements or further developments. No binding warranty is made regarding the suitability of our products for any specific use. Content and claims are for your consideration and verification only. GMB is not liable for any damages resulting from the use of this presentation.